

Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 to 14. (Canceled).

15. (Currently Amended) ~~The method of claim 14,~~ A method for manufacturing a semiconductor system, comprising:

forming a pn transition;

forming a chip having an edge region, the chip including a first layer of a first conductivity type and a second layer of a second conductivity type opposite to that of the first conductivity type, the first layer having the edge region and a center region, the pn transition being provided between the first layer and the second layer;

doping the second layer more weakly in the edge region than in the center region, wherein a boundary surface of the pn transition is non-parallel to the main chip plane at the edge region; and

wherein the first layer is manufactured using patterned doping, and wherein the patterned doping is provided by pre-coating the chip with dopant, subsequently removing the coating in a sub-region of the chip, and subsequently introducing the dopant into the chip.

16. (Previously Presented) The method of claim 15, wherein the coating is removed by sawing.

17. (Previously Presented) The method of claim 16, wherein the sawing is performed with at least one of a diamond saw and water-supported laser cutting.

18. (Currently Amended) The method of claim ~~[[14]]~~ 15, wherein the chip is pre-coated with dopant via at least one of APCVD deposition of a doped glass, a doping film, a gas phase coating, ion implantation, and an application of doping pastes.